

REMARKS

Further and favorable reconsideration is respectfully requested in view of the foregoing amendment and following remarks.

Thus, claim 1 has been amended to recite that the moisture absorptive and desorptive paper is obtained by the method of claim 10 or 11. The significance of this limitation will be discussed later on below.

The rejection of claim 11 under the first paragraph of 35 U.S.C 112, as failing to comply with the written description requirement, is respectfully traversed.

The Examiner states that in the examples, such as described in paragraph 86, paper is dipped into an emulsion of organic particles but there is no disclosure of impregnation of the paper with the particles. The Examiner further states that while dipping can result in impregnation, it can also result in only coating a paper. However, as stated in paragraph [0047] of the specification:

“There is no particular limitation for the impregnation method at that time and a method such as dipping, spraying and coating may be adopted.”

Thus, each of dipping, spraying and coating of the aqueous liquid results in impregnation of the paper with the aqueous liquid, as recited in current claim 11. That is, contrary to the position taken by the Examiner, coating the aqueous liquid onto the paper results in impregnating the paper with the aqueous liquid.

Thus, Applicants respectfully submit that the specification includes a written description of the method recited in claim 11 sufficient to comply with the first paragraph of 35 U.S.C. 112, and accordingly, the rejection of claim 11 under 35 U.S.C. 112 should be withdrawn.

The patentability of the presently claimed invention over the disclosures of the references relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Thus, the rejection of claims 1 and 4-12 under 35 U.S.C. 103(a) as being unpatentable over Belding et al. (US '153) in view of Nishida (US '265) as evidenced by Lorah et al. (US '581), as well as the rejection of claims 1, 4, 6-9 and 12 under 35 U.S.C. 103 (a) as being unpatentable over Belding et al. in view of Tanaka et al. (US '421), the rejection of claims 1, 4-9 and 12 under 35 U.S.C. 103 (a) as being unpatentable over Belding et al. in view of Nishida et al. (US '797 or US '970) and the rejection of claims 10 and 11 under 35 U.S.C. 103(a) as being

unpatentable over Belding et al. in view of Tanaka et al. or Nishida ('797 or '970) and further in view of Nishida ('265) and as evidenced by Lorah et al. are all respectfully traversed.

As clarified by the above amendment to claim 1, the moisture absorptive and desorptive paper of the present invention has an essential feature that the paper is manufactured by using "water where the concentration of cations excluding the metal ions bonded to the acidic group (contained in the organic fine particles) is not more than 1 ppm". The present invention was achieved on the basis of the finding that ion-exchange of a minor amount of metal ions existing in water with the acidic group contained in the organic fine particles leads to a decrease of the moisture absorptive and desorptive property of the moisture absorptive and desorptive paper, and the finding that, in order to prevent such a negative influence, it is effective to use "water where the concentration of cations excluding the metal ions bonded to the acidic group is not more than 1 ppm" in the manufacture of the moisture absorptive and desorptive paper.

In this regard, the Examiner cites Lorah et al. and states that polymers containing acid groups are well known to exchange cations readily and thus it would have been obvious to one of ordinary skill in the art to use distilled water or deionized water in order to prevent exchange of non potassium ions with the potassium ions of the carboxylic salts in the particles and lower the efficiency thereof for the intended absorption and desorption (page 6 of the Official Action).

However, Lorah et al. merely disclose that polymers containing acid groups exchange cations. The reference fails to disclose the negative influence caused by cation exchange. Also, Lorah et al. never disclose any specific means for preventing cation exchange.

Also, Nishida '265, Tanaka et al., Nishida '970 and Nishida '797 never recognize that ion-exchange of a minor amount of metal ions existing in water with the acidic group contained in the organic fine particles leads to a decrease of moisture absorptive and desorptive property of the moisture absorptive and desorptive paper. These references also fail to recognize the need to prevent such a decrease. Rather, these references provide no comment about the metal ions in the water to be used for manufacture of the moisture absorptive and desorptive paper. This means that these references neglect the metal ions in the water as having no influence on the property of the manufactured paper. Therefore, they naturally disclose no specific means for preventing the decrease of the moisture absorptive and desorptive property of the paper.

As fully stated above, none of the cited references recognize that a minor amount of metal ions existing in water leads to a decrease of the moisture absorptive and desorptive


property of the moisture absorptive and desorptive paper. Such references fail to suggest using "water where the concentration of cations excluding the metal ions bonded to the acidic group (contained in the organic fine particles) is not more than 1 ppm" in the manufacture of the moisture absorptive and desorptive paper.

In this regard, in determining the differences between the prior art and the claimed invention, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious but whether the claimed invention "as a whole" would have been obvious (MPEP 2141.02 I). Discovering the source/cause of a problem is part of the "as a whole" inquiry, and should always be considered in determining the obviousness of an invention under 35 U.S.C. 103 (MPEP 2141.02 III). Referring to paragraph [0017] in the present specification, Applicants discovered that the source/cause of a decrease of the moisture absorptive and desorptive property of moisture absorptive and desorptive paper is the minor amount of metal ions existing in water, which can be avoided by using water where the concentration of cations excluding the metal ions bonded to the acidic group contained in the organic fine particles is not more than 1 ppm. Since none of the cited references disclose or suggest this source/cause of a decrease in the moisture absorptive and desorptive property, Applicants take the position that the present invention as claimed is clearly patentable over the applied references.

Therefore, in view of the foregoing amendment and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

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